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By Michelle Chan
Michelle Chan

201
PATENT 31402
100/00344

jc997 U.S. PTO
10/036245
10/24/01

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

J. WALLACE PARCE et al.

Application No.: To be Assigned

Filed: Herewith

For: HIGH THROUGHPUT SCREENING
ASSAY SYSTEMS IN MICROSCALE
FLUIDIC DEVICES

Examiner: Unknown

Art Unit: Unknown

INFORMATION DISCLOSURE
STATEMENT UNDER 37 CFR § 1.97
AND 1.98

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

The references cited on the attached form PTO-1449 are being called to the attention of the Examiner. This application is a continuation of U.S.S.N. 09/346,660, filed July 1, 1999, which is a continuation of U.S.S.N. 08/671,987, filed June 28, 1996. All references cited in the attached form 1449 have been previously cited in these applications. Copies of documents are therefore not being provided pursuant to 37 CFR §1.98(d). If copies of the references are not available to the Examiner, the Examiner is invited to contact the undersigned.

It is respectfully requested that the cited information be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

As provided for by 37 CFR §1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no representation is made that a search has been conducted or that this statement encompasses all possible relevant information.

Applicants believe that no fee is required for submission of this statement, since it is being submitted within three months of the filing date or prior to the first Office Action. However, if a fee is required, the Commissioner is authorized to charge such fee to Deposit Account No. 03-0177. Please charge any additional fees or credit any overpayment to the above-noted deposit account.

Respectfully submitted,



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Substitute for form 1449A-B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)	Complete if Known	
	Application Number	
	Filing Date	Herewith
	First Named Inventor	J. Wallace Parce
	Group Art Unit	
	Examiner Name	
	Attorney Docket Number	100/00344

10/038245
10/24/01



U.S. PATENT DOCUMENTS						
Examiner Initials	Cite No.	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, lines, Where Relevant Passages or Relevant Figures Appeal
		Number	Kind Code (if known)			
	AA	3,918,908		Moyer et al.	11-11-1975	
	AB	4,390,403		Batchelder	06-28-1983	
	AC	4,443,408		Mintz	04-17-1984	
	AD	4,554,839		Hewett et al.	11-26-1985	
	AE	4,675,300		Zare et al.	06-23-1987	
	AF	4,737,464		McConnell et al.	04-12-1988	
	AG	4,740,708		Batchelder	04-26-1988	
	AH	4,756,884		Hillman et al.	07-12-1988	
	AI	4,908,112		Pace	03-13-1990	
	AJ	4,952,518		Johnson et al.	08-28-1990	
	AK	4,963,498		Hillman et al.,	10-16-1990	
	AL	4,978,503		Shanks et al.	12-18-1990	
	AM	5,096,807		Leaback	03-17-1992	
	AN	5,108,703		Pfost et al.	04-28-1992	
	AO	5,126,022		Soane et al.	06-30-1992	
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	AR	5,147,606		Charlton et al.	09-15-1992	
	AS	5,164,598		Hillman et al.	11-17-1992	
	AT	5,171,132		Miyazaki et al.	12-15-1992	
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	AV	5,188,963		Stapleton	02-23-1993	
	AW	5,192,405		Petersen et al.	03-09-1993	
	AX	5,223,219		Subramanian et al.	05-29-1993	
	AY	5,271,724		van Lintel	12-21-1993	
	AZ	5,277,556		van Lintel	01-11-1994	
	BA	5,278,048		Parce et al.	01-11-1994	
Examiner Signature					Date Considered	

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	Attorney Docket Number	100/00344

	BB	5,296,114		Manz	03-22-1994	
	BC	5,296,375		Kricka et al.	03-22-1994	
	BD	5,304,487		Wilding et al.	04-19-1994	
	BE	5,324,591		Georger, Jr. et al.	06-28-1994	
	BF	5,375,979		Trah	12-27-1994	
	BG	5,384,261		Winkler et al.	01-24-1995	
	BH	5,395,503		Parce et al.	03-07-1995	
	BI	5,427,946		Kricka et al.	06-27-1995	
	BJ	5,429,734		Gajar	07-04-1995	
	BK	5,441,894		Coleman et al.	08-15-1995	
	BL	5,445,939		Anderson	08-29-1995	
	BM	5,460,709		Sarrine et al.	10-24-1995	
	BN	5,486,335		Wilding et al.	01-23-1996	
	BO	5,496,697		Parce et al.	03-05-1996	
	BP	5,498,392		Wilding et al.	03-12-1996	
	BQ	5,540,889		Gordon et al.	07-30-1996	
	BR	5,560,811		Briggs et al.	10-01-1996	
	BS	5,571,410		Swedberg et al.	11-05-1996	
	BT	5,585,069		Zanzucchi et al.	12-17-1996	
	BU	5,593,838		Zanzucchi et al.	01-14-1997	
	BV	5,605,662		Heller et al.	02-25-1997	
	BW	5,627,643		Brinbaum et al.	05-06-1997	
	BX	5,632,876		Zanzucchi et al.	05-27-1997	
	BY	5,635,358		Wilding et al.	06-03-1997	
	BZ	5,637,458		Frankel et al.	06-10-1997	
	CA	5,637,469		Wilding et al.	06-10-1997	
	CB	5,645,702		Witt et al.	07-08-1997	
	CC	5,650,075		Haas	07-22-1997	
	CD	5,658,723		Oberhardt	08-19-1997	

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	CE	5,699,157		Parce	12-16-1997	
	CF	5,716,825		Hancock et al.	02-10-1998	
	CG	5,726,026		Wilding et al.	03-10-1998	
	CH	5,731,212		Gavin et al.	03-24-1998	
	CI	5,750,015		Soane et al.	05-12-1998	
	CJ	5,755,942		Zanzucchi et al.	05-26-1998	
	CK	5,770,029		Nelson et al.	06-23-1998	
	CL	5,773,298		Lynggaard et al.	06-30-1998	
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	CO	5,783,397		Hughes et al.	07-21-1998	
	CP	5,800,690		Chow et al.	09-01-1998	
	CQ	5,824,204		Jerman	10-20-1998	
	CR	5,830,681		Hursting et al.	11-03-1998	
	CS	5,842,787		Kopf-Sill et al.	12-01-1998	
	CT	5,852,495		Parce	12-22-1998	
	CU	5,858,187		Ramsey et al.	01-12-1999	
	CV	5,858,188		Soane et al.	01-12-1999	
	CW	5,858,195		Ramsey	01-12-1999	
	CX	5,858,804		Zanzucchi et al.	01-12-1999	
	CY	5,863,708		Zanzucchi et al.	01-26-1999	
	CZ	5,869,004		Parce et al.	02-09-1999	
	DA	5,876,675		Kennedy	03-02-1999	
	DB	5,880,071		Parce et al.	03-09-1999	
	DC	5,882,465		McReynolds	03-16-1999	
	DD	5,885,470		Parce et al.	03-23-1999	
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	DF	5,942,433		Vinson et al.	08-24-1999	
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	DH	5,948,227		Dubrow	09-07-1999	
	DI	5,955,028		Chow	09-21-1999	
	DJ	5,957,579		Kopf-Sill et al.	09-28-1999	
	DK	5,958,203		Parce et al.	09-28-1999	
	DL	5,958,694		Nikiforov	09-28-1999	
	DM	5,959,291		Jensen	09-28-1999	
	DN	6,132,685		Kercso et al.	10-17-2000	

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Examiner Initials	Cite No.	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
		Office	Number	Kind Code (if known)				
	DO	UK	2 248 891			04-22-1992		
	DP	EP	568 902			11-10-1993		
	DQ	EP	637 998			07-31-1996		
	DR	EP	639 223			07-03-1996		
	DS	WO	9405414			03-17-1994		
	DT	WO	9512608			05-11-1995		
	DU	WO	9527210			10-12-1995		
	DV	WO	9527211			10-12-1995		
	DW	WO	9533846			12-14-1995		
	DX	WO	9604547			02-15-1996		
	DY	WO	9614933			05-23-1996		
	DZ	WO	9614934			05-23-1996		
	EA	WO	9615269			05-23-1996		
	EB	WO	9702357			01-23-1997		
	EC	WO	9722000			06-19-1997		
	ED	WO	9800231		Caliper	01-08-1998		
	EF	WO	9800705		Caliper	01-08-1998		
	EG	WO	9800707		Caliper	01-08-1998		
	EH	WO	9802728		Caliper	01-22-1998		

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	EI	WO	9805424		Caliper	02-12-1998		
	EJ	WO	9805959		Caliper	02-12-1998		
	EK	WO	9822811		Caliper	05-28-1998		
	EL	WO	9845481		Caliper	10-15-1998		
	EM	WO	9845929		Caliper	10-15-1998		
	EN	WO	9846438		Caliper	10-22-1998		
	EO	WO	9849548		Caliper	11-05-1998		
	EP	WO	9855852		Caliper	12-10-1998		
	EQ	WO	9856956		Caliper	12-17-1998		
	ER	WO	9900649		Caliper	01-07-1999		
	ES	WO	9910735		Caliper	03-04-1999		
	ET	WO	9912016		Caliper	03-11-1999		
	EU	WO	9916162		Caliper	04-01-1999		
	EV	WO	9919056		Caliper	04-22-1999		
	EW	WO	9919516		Caliper	04-22-1999		
	EX	WO	9929497		Caliper	06-17-1999		

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS				
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		
	EY	BAO, J. et al., "Ultramicro enzyme assays in a capillary electrophoretic system," <u>J. Chrom.</u> 608:217-224 (1992)		
	EZ	BUNIN et al., "A General and Expedient Method for the Solid-Phase Synthesis of 1,4-Benzodiazepine Derivatives," <u>J. Amer. Chem. Soc.</u> 114:10997-10998 (1992)		
	FA	CHO et al., "An Unnatural Biopolymer," <u>Science</u> 261:1303-1305 (1993)		
	FB	CHU, Y-H. et al., "Affinity Capillary Electrophoresis - Mass Spectrometry for Screening Combinatorial Libraries," <u>J. Am. Chem. Soc.</u> 118:7827-7835 (1996)		
	FC	COHEN, C.B. et al., "A microchip-based enzyme assay for protein kinase A," <u>Anal. Biochem.</u> 273:89-97 (1999)		
	FD	DASGUPTA, P.K. et al., "Electroosmosis: A Reliable Fluid Propulsion System for Flow Injection Analysis," <u>Anal. Chem.</u> 66:1792-1798 (1994)		

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	First Named Inventor	J. Wallace Parce
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	Examiner Name	
	Attorney Docket Number	100/00344

	FE	EFFENHAUSER, C.S. et al., "Glass chips for high-speed capillary electrophoresis separations with submicrometer plate heights," <u>Anal. Chem.</u> 65:2637-2642 (1993)	
	FF	EFFENHAUSER, C.S. et al., "High-speed separation of antisense oligonucleotides on a micromachined capillary electrophoresis device," <u>Anal. Chem.</u> 66:2949-2953 (1994)	
	FG	HARMON, B.J. et al., "Mathematical Treatment of Electrophoretically Mediated Microanalysis," <u>Anal. Chem.</u> 65:2655-2662 (1993)	
	FH	HARMON, B.J. et al., "Selectivity in Electrophoretically Mediated Microanalysis by Control of Product Detection Time," <u>Anal. Chem.</u> 66:3797-3805 (1994)	
	FI	HARRISON, D.J. et al., "Capillary Electrophoresis and Sample Injection Systems Integrated on a Planar Glass Chip," <u>Anal. Chem.</u> 64:1926-1932 (1992)	
	FJ	HARRISON, D.J. et al., "Micromachining a Miniaturized Capillary Electrophoresis-Based Chemical Analysis System on a Chip," <u>Science</u> 261:895-897 (1993)	
	FK	JACOBSON, S.C. et al., "Effects of Injection Schemes and Column Geometry on the Performance of Microchip Electrophoresis Devices," <u>Anal. Chem.</u> 66(7):1107-1113 (1994)	
	FL	JACOBSON, S.C. et al., "High-Speed Separations on a Microchip," <u>Anal. Chem.</u> 66(7):1114-1118 (1994)	
	FM	JACOBSON, S.C. et al., "Open Channel Electrochromatography on a Microchip," <u>Anal. Chem.</u> 66(14):2369-2373 (1994)	
	FN	JACOBSON, S.C. et al., "Fused Quartz Substrates for Microchip Electrophoresis," <u>Anal. Chem.</u> 67:2059-2063 (1995)	
	FO	JACOBSON, S.C. et al., "Microchip electrophoresis with sample stacking," <u>Electrophoresis</u> 16:481-486 (1995)	
	FP	JUNG et al., "Multiple Peptide Synthesis Methods and Their Applications," <u>Angew. Chem. Int. Ed. Engl.</u> 31(4):367-383 (1992)	
	FQ	KIKUCHI, Y. et al., "Optically Accessible Microchannels Formed in a Single-Crystal Silicon Substrate for Studies of Blood Rheology," <u>Microvascular Research</u> 44:226-240 (1992)	
	FR	KOUTNY, L.B. et al., "Microchip Electrophoretic Immunoassay for Serum Cortisol," <u>Anal. Chem.</u> 68:18-22 (1996)	
	FS	KRAAK et al., "Study of protein-drug binding using capillary zone electrophoresis," <u>J. Chrom.</u> 608:257-264 (1992)	
	FT	LINHARES, M.C. et al., "Use of an On-Column Fracture in Capillary Zone Electrophoresis for Sample Introduction," <u>Anal. Chem.</u> 63:2076-2078 (1991)	
	FU	MANZ, A. et al., "Miniaturized Total Chemical Analysis Systems: a novel concept for Chemical Sensing," <u>Sensors and Actuators B</u> 1:244-248 (1990)	

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	Attorney Docket Number	100/00344

	FV	MANZ, A. et al., "Micromachining of monocrystalline silicon and glass for chemical analysis systems," <u>Trends in Anal. Chem.</u> 10(5):144-149 (1991)	
	FW	MANZ, A. et al., "Planar chip technology for miniaturization and integration of separation techniques into monitoring systems," <u>J. Chrom.</u> 593:253-258 (1992)	
	FX	MANZ, A. et al., "Electroosmotic pumping and electrophoretic separations for miniaturized chemical analysis systems," <u>J. Micromech. Microeng.</u> 4:257-265 (1994)	
	FY	PAVIA et al., "The Generation of Molecular Diversity," <u>Bioorg. Med. Chem. Lett.</u> 3(3):387-396 (1993)	
	FZ	RAMSEY, J.M. et al., "Microfabricated chemical measurement systems," <u>Nature Med.</u> 1:1093-1096 (1995)	
	GA	SCHMALZING, D. et al., "Solution-Phase Immunoassay for Determination of Cortisol in Serum by Capillary Electrophoresis," <u>Clin. Chem.</u> 41(9):1403-1406 (1995)	
	GB	SEILER, K. et al., "Planar Glass Chips for Capillary Electrophoresis: Repetitive Sample Injection, Quantitation, and Separation Efficiency," <u>Anal. Chem.</u> 65:1481-1488 (1993)	
	GC	SEILER, K. et al., "Electroosmotic Pumping and Valveless Control of Fluid Flow Within a Manifold of Capillaries on a Glass Chip," <u>Anal. Chem.</u> 66:3485-3491 (1994)	
	GD	SIMON et al., "Peptoids: A modular approach to drug discovery," <u>PNAS</u> 89:9367-9371 (1992)	
	GE	SONG, M.I. et al., "Multisample Analysis Using an Array of Microreactors for an Alternating-Current Field-Enhanced Latex Immunoassay," <u>Anal. Chem.</u> 66(6):778-781 (1994)	
	GF	WEAVER et al., "Gel microdroplets: rapid detection and enumeration of individual microorganisms by their metabolic activity," <u>Bio/Technology</u> 6:1084-1089 (1988)	
	GG	WILEY et al., "Peptidomimetics derived from Natural Products," <u>Med. Res. Rev.</u> , 13:327-384 (1993)	
	GH	WOOLLEY, A.T. et al., "Ultra-high-speed DNA fragment separations using microfabricated capillary array electrophoresis chips," <u>PNAS</u> 91:11348-11352 (1994)	
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